

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed August 25, 2009. At the time of the Office Action, Claims 1-15 were pending in this Application. Claims 1-15 were rejected. Claims 1, 5, 6, 11, 14, and 17 are herein amended; Claim 18 is herein cancelled without prejudice or disclaimer; and new dependent Claims 19-21 are added. Applicants respectfully request reconsideration and allowance of all pending claims.

Rejections under 35 U.S.C. § 112

Claims 5-6 and 14-15 were rejected by the Examiner under 35 U.S.C. §112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants amend Claims 4 and 5 to clarify that the recited “signs” refer to “arithmetic signs” (e.g., + and – signs). Applicants have also substantially amended Claim 14 to overcome the present rejection. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. §112, second paragraph be withdrawn.

Rejections under 35 U.S.C. §103

Claims 1-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,017,841 issued to Ehrenfried Albert Tirschler (“*Tirschler*”).

Applicants respectfully traverse and submit that Applicants’ claims are not obvious in view of *Tirschler* because *Tirschler* does not teach all elements of Applicant’s claims. For example, amended Claim 1 recites:

1. A method for detaching a frozen charge from the inner wall of a grinding pipe, comprising the steps of:

controlling a drive device of the grinding pipe to control the angle of rotation and the speed of rotation of the grinding pipe; and

varying the speed of rotation of the grinding pipe by the drive device in order to detach the frozen charge from the inner wall of the grinding pipe.

Amended independent Claims 11 and 14 recite similar limitations. Thus, Applicants' claims specifically recite *varying the speed of rotation of a grinding pipe in order to detach a frozen charge from an inner wall of the grinding pipe*. For example, in the example embodiments shown in Figures 4 and 5, a frozen charge is detached by oscillating the grinding pipe about predetermined angles of rotation, ϕ_1 and ϕ_2 .

FIG 4

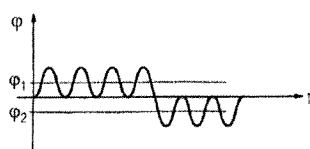
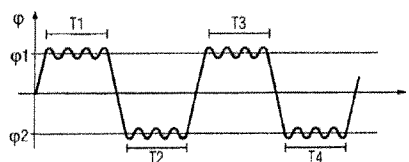


FIG 5



Tirschler does not teach *detaching a frozen charge*, much less using the specific technique of *varying the speed of rotation of a grinding pipe in order to detach a frozen charge*. The Examiner argues that “This patent discloses the basic concept of preventing a rotary mill from being damaged by a frozen charge including the control of a motor.” (Office Action, page 2). However, finding prior art that simply teaches the same “basic concept” as the claimed subject matter is not the standard for a prima facie showing of obviousness (also, as discussed below, *Tirschler* does not teach the same basic concept as Applicants' claimed invention). Rather, the reference(s) cited by the Examiner must actually teach or suggest the claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). In order to provide a prima facie showing of obviousness, the Examiner must show each claimed limitation in the reference(s):

“When determining whether a claim is obvious, an examiner must make ‘a searching **comparison of the claimed invention – including all its limitations – with the teaching of the prior art.**’ *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, ‘**obviousness requires a suggestion of all limitations in a claim.**’ *CFMT, Inc. v.*

Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). Moreover, as the Supreme Court recently stated, ‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.’ *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).” (emphasis added.)

The Examiner has failed to make such a showing. The Examiner alleges that “the control means of [*Tirschler*] ***could be configured***” to perform the functions recited in Applicants’ claims, and “thus is well within the scope of one skilled in the art and of no patentable merit.”

However, whether *Tirschler*’s system “*could be configured*” to provide the claimed functions is not the proper legal test. Claim 1 recites is a method claim that recites the positive step of “varying the speed of rotation of the grinding pipe by the drive device in order to detach the frozen charge from the inner wall of the grinding pipe.” Thus, the Examiner must show teaching or suggestion of *actually performing this specific step*. Similarly, Claims 11 and 14 recite a control device *including instructions for* varying the speed of rotation of a grinding pipe in order to detach a frozen charge. Thus, the Examiner must point to a control device that *actually includes such instructions*.

Tirschler does not teach ***detaching a frozen charge at all***, much less doing so by varying the speed of rotation of the grinding pipe. Instead, *Tirschler* teaches a technique for determining that the material in the drum is ***not detaching*** from the inner wall of the drum, and thus ***stopping*** the rotation of a mill drum, in order to ***prevent the material from detaching*** and falling to the floor of the drum from an undesirable height, thus damaging the drum. Thus, although *Tirschler* may have the same ultimate goal as Applicants -- namely, to prevent damage to the mill -- Applicants’ claimed technique of varying the speed of rotation of the grinding pipe to actually detach a frozen charge is very different from *Tirschler*’s technique of simply stopping the mill when a frozen charge is detected. *Tirschler* does not teach using its “stopping” technique, or any technique, to ***detach a frozen charge*** from the inner wall of the drum. There is simply no teaching or suggestion in *Tirschler* to perform the specific limitations of Applicants’ claims.

For at least these reasons, Applicants respectfully submit that amended Claim 1 is allowable over *Tirschler*. Therefore, Applicants respectfully request reconsideration and allowance of amended Claim 1, as well as Claims 2-10 that depend from Claim 1. In addition, for analogous reasons, Applicants respectfully request reconsideration and allowance of amended independent Claims 11 and 14, as well as Claims 12-13 and 15-17 that depend therefrom.

CONCLUSION

Applicants have made an earnest effort to place this case in condition for allowance in light of the remarks set forth above. Applicants respectfully request reconsideration of the pending claims.

Applicant respectfully submits a Petition for Two-Month Extension of Time. The Commissioner is authorized to charge the fee of \$490 required to Deposit Account 50-4871 in order to effectuate this filing.

Applicants believe there are no other fees due at this time. However, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-4871 of King & Spalding L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512-457-2030.

Respectfully submitted,
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